

**CLAIMS**

1. A data matching method comprising:
  - a configuration component accumulating step  
accumulating a configuration component generated by  
5 decomposing a measuring quantity of an object by a  
predetermined method and a plurality of states of said  
object each of which is corresponding to said  
configuration component;
  - a component decomposing step decomposing a  
10 measuring quantity of a matching target object into  
said configuration component at a predetermined state  
of said plurality of states;
  - a parameter conversion step converting a  
parameter corresponding to said configuration  
15 component of said predetermined state into a  
converted parameter of a second state of said  
plurality of states different from said predetermined  
state;
  - a state change data generating step  
20 generating a state change data by adding a  
predetermined state change to a data of said matching  
target object by using said configuration component  
accumulated in said configuration component  
accumulating step and said converted parameter; and  
25 a matching step matching said state change  
data and a previously accumulated matching data.

2.           The data matching method according to claim 1, wherein said predetermined method is a principal component analysis.

5   3.           A data matching method comprising:  
              a configuration component accumulating step  
              accumulating a configuration component generated by  
              decomposing a measuring quantity of an object by a  
              predetermined method and a plurality of states of said  
10   object each of which is corresponding to said  
              configuration component;  
              a connecting step connecting a parameter  
              corresponding to said configuration component at a  
              first state of said plurality of states and a  
15   parameter corresponding to said configuration  
              component at a second state through a conversion using  
              a learning;  
              a state change data generating step  
              generating a state change data of said second state  
20   by converting a data of said matching target object  
              at said first state through a conversion using said  
              learning; and  
              a matching step matching said state change  
              data and a matching data accumulated in advance.

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4.           The data matching method according to any of claims 1 to 3, wherein the data of said matching target

is a biometrics data.

5.           The data matching method according to any of  
claims 1 to 4, wherein each of said plurality of states  
5 corresponds to a state at a different time through  
a course of aging.

6.           The data matching method according to any of  
claims 1 to 5, wherein said measuring quantity is an  
10 image of a face.

7.           A data matching apparatus comprising:  
              a configuration component accumulating unit  
configured to accumulate a configuration component  
15 generated by decomposing a measuring quantity of an  
object by a predetermined method and a plurality of  
states of said object each of which is corresponding  
to said configuration component;

              a component decomposing unit configured to  
20 decompose a measuring quantity of a matching target  
object into said configuration component at a  
predetermined state of said plurality of states;

              a parameter conversing unit configured to  
converting a parameter corresponding to said  
25 configuration component of said predetermined state  
into a converted parameter of a second state of said  
plurality of states different from said predetermined

state;

a state change data generating unit  
configured to generate a state change data by adding  
a predetermined state change to a data of said  
5 matching target object by using said configuration  
component accumulated in said configuration  
component accumulating step and said converted  
parameter; and

a matching unit configured to match said state  
10 change data and a previously accumulated matching  
data.

8. The data matching apparatus according to  
claim 7, wherein said predetermined method is a  
15 principal component analysis.

9. A data matching apparatus comprising:  
a configuration component accumulating unit  
configured to accumulate a configuration component  
20 generated by decomposing a measuring quantity of an  
object by a predetermined method and a plurality of  
states of said object each of which is corresponding  
to said configuration component;

a connecting unit configured to connect a  
25 parameter corresponding to said configuration  
component at a first state of said plurality of states  
and a parameter corresponding to said configuration

component at a second state through a conversion using  
a learning;

a state change data generating unit  
configured to generate a state change data of said  
5 second state by converting a data of said matching  
target object at said first state through a conversion  
using said learning; and

a matching unit configured to match said state  
change data and a matching data accumulated in  
10 advance.

10. The data matching apparatus according to any  
of claims 7 to 9, wherein the data of said matching  
target is a biometrics data.

15 11. The data matching apparatus according to any  
of claims 7 to 10, wherein each of said plurality of  
states corresponds to a state at a different time  
through a course of aging.

20 12. The data matching apparatus according to any  
of claims 7 to 11, wherein said measuring quantity  
is an image of a face.

25 13. A data matching program for instructing a  
computer to execute a method comprising:

a configuration component accumulating step

accumulating a configuration component generated by decomposing a measuring quantity of an object by a predetermined method and a plurality of states of said object each of which is corresponding to said

5 configuration component;

a component decomposing step decomposing a measuring quantity of a matching target object into said configuration component at a predetermined state of said plurality of states;

10 a parameter conversion step converting a parameter corresponding to said configuration component of said predetermined state into a converted parameter of a second state of said plurality of states different from said predetermined  
15 state;

a state change data generating step generating a state change data by adding a predetermined state change to a data of said matching target object by using said configuration component accumulated in said configuration component  
20 accumulating step and said converted parameter; and

a matching step matching said state change data and a previously accumulated matching data.

25 14. A data matching program for instructing a computer to execute a method comprising:

a configuration component accumulating step

accumulating a configuration component generated by decomposing a measuring quantity of an object by a predetermined method and a plurality of states of said object each of which is corresponding to said

5 configuration component;

a connecting step connecting a parameter corresponding to said configuration component at a first state of said plurality of states and a parameter corresponding to said configuration

10 component at a second state through a conversion using a learning;

a state change data generating step generating a state change data of said second state by converting a data of said matching target object at said first state through a conversion using said  
15 learning; and

a matching step matching said state change data and a matching data accumulated in advance.